to state; although the action is probably upon the nervous system and not upon the muscular fibres themselves. In some cases there is partial anæsthesia of the skin, appearing when the effect of the drug begins to wear off. The action of the heart is at first rendered more slow and somewhat weaker in quality; later there is a rise to normal quality and rapidity, which continues during the period of the greatest activity of the drug. When the muscular depression is greatest, slight, if any, depression of the heart is present. The respiration is usually unaffected. Upon the stomach the effect varies from a feeling of uneasiness and fulness to nausea and vomiting. There is also inability to sleep for at least twelve hours after the effects ot the drug pass off. There is also a loss of the sense of time. Thus it will be seen that the drug in its physiological action is not identical with any other known drug. Mescal buttons must not be confounded with the intoxicating drink known as "mescal," which is the fermented juice of one or more of the species of agave.—*Therapeutic Gazette*, 1895, No. 9, p. 577.

THE USE OF OXYGEN GAS WITH ETHER FOR ANÆSTHESIA.

DR. CARTER S. COLE makes use of the gas which is passed from the receiver through the wash-bottle into a covered tin case, which is fitted with a rubber face-piece. The amount of gas used was probably about a gallon a minute; the amount of ether for an adult was about six ounces an hour, and half of that quantity for a child. The time required for complete anæsthesia varied from three to fifteen minutes. The time of recovery from fifteen to fifty minutes. Vomiting has not been serious or troublesome in any case, and in the large majority not even nausea has attended the etherization or the recovery. The effect of increasing the flow of oxygen has been to increase the rapidity of the heart's action and *vice versa*. Respiration has been easy and comfortable, and no struggling nor suffocation has been present. The stage of excitement has been moderate and never troublesome. The color has been uniformly excellent, and not in a single instance has any "bluing" been observed. In the cases in which the temperature has been taken no change has been noted. If each operator will compare the amount of ether used, the time required for narcosis, the frequent absence of suffocation, salivation, struggling, nausea, and vomiting, with the conditions which now attend his etherization, he will then be able to draw some conclusions as to the value of the method. A brief report of twenty-one instances in which this method has been employed is subjoined.—*The Medical Record*, 1895, No. 1301, p. 505.

APOCYNUM CANNABINUM.

DR. F. BOUSQUET notes that Glinski and Semenoff in 1894 found that this drug was a violent cardiac poison, which, in large doses, stopped the heart in incomplete systole, and in small doses slowed the beats and strengthened their force. They believed that it contained an active principle which acts as does digitalis, with, however, these differences, that it is not cumulative, and when administered in a determined medicinal dose, it does not give rise to any inconvenience excepting some headache. Froment has reported ten instances of diverse cardiac disease in the stage of imperfect systole in which the pulse was slowed, the rhythm was made regular, the arterial tension was raised, and œdema disappeared; in certain cases it acted when strophanthus and tincture of convallaria had failed. It seems to be useful in certain febrile conditions when the frequency of the pulse gives rise to anxiety, notably in pulmonary tuberculosis, but a large dose may increase an existing diarrhœa. Dabney believes that it can absorb an acute pleurisy. It may be an excellent diuretic to employ in the anasarca of Bright's disease, because it diminishes the total quantity of albumin and the hyaline casts.—*La Presse Médicale*, 1895, No. 143, p. 340.

THE TREATMENT OF DIABETES MELLITUS BY URANIUM NITRATE.

DR. SAMUEL WEST reports three instances in which he has used the drug, and they point to the conclusion that it has a powerful effect upon diabetes. In two cases when the amount of sugar was largely influenced by diet it is probable that it may be found most useful in this class of cases because of its physiological action upon digestion. That the effect is clearly due to the drug is shown by the fact that when dieting and ordinary treatment have produced all the improvement they can in the patient, still further improvement takes place after the administration of the drug, leading in the second case to an entire disappearance of sugar from the urine for a considerable period of time, and, in the first case, to what was practically the same thing. In the third case, also, when the patient had been treated by varieties of drugs, especially by codeine, the administration of uranium caused great improvement. It is believed that its action is due chiefly to the effect it has in checking the rapid digestion of starch and of some forms of albumin, and that it may, perhaps, be especially useful by controlling excessive pancreatic digestion. In the second case the patient attributed the loss of flesh to the drug. This is probably doubtful because the first continued to gain weight while taking much larger doses. The salts in use were the nitrate and double chloride, with quinine. The nitrate is best administered freely diluted with water and after food, commencing with a small dose of one or two grains twice daily, after the chief meal, and increasing the quantity slowly at intervals of a few days until its effect is produced. Given in this way it has not disturbed digestion nor caused any irritation of the stomach or bowels. Prolonged administration apparently does not produce albuminuria.—*The British Medical Journal*, 1895, No. 1808, p. 467.

THE TREATMENT OF MORBUS CORDIS BY THE IODIDES AND OTHER DRUGS WHICH LOWER THE BLOOD-PRESSURE.

DR. A. HAIG shows by pulse-tracings the effects of opium, exercise, and the iodides, including that of ethyl iodide. While it is true that baths, exercise, and drugs dilate the arterioles and capillaries and lessen the work of the heart, we must not forget that in dilating or allowing the dilatation of the capillaries all over the body, they of necessity dilate those of the heart itself, so they not only reduce the work which it has to do, but at the same time improve its interstitial circulation and its nutrition. In certain cases where the whole of the circulatory troubles may be the result of more or less chronic contractions of arterioles and high blood-pressure, the obvious indication is to relax the arterioles and lower the blood-pressure. The danger after opium is, that when you reduce the dose or leave it off, there is a rebound with a very high blood-pressure. The iodides are in the same way followed by a rebound, but this rarely gives much trouble till they have been taken for weeks or perhaps months. The rebound after both opium and the iodides can be prevented by the same means, namely, by giving short courses of sodium salicylate to carry off the accumulated uric acid, the cause of increased arterial tension. In the morbus cordis of middle or later life there are no more important drugs than these, which, like the iodides, relax the arterioles and lower the blood-pressure. On the other hand, such drugs as digitalis, which contract the arterioles and raise the blood-pressure, may do great harm.—*Therapeutic Gazette*, 1895, No. 9, p. 590.

THE REDUCTION OF OXYHÆMOGLOBIN IN LIVING TISSUES.

DR. A. HÉNOCQUE states that the therapeutic agents which modify the activity of this process act either upon the blood directly, upon the organs which prepare and restore the blood, or upon the trophic nervous centres and consequently upon the ultimate tissue changes. Those which increase the activity of tissue changes are iron, uncooked meat, tonic food, which bring about an immediate building-up of the globules, or others act directly upon the nervous system to strengthen it, as the bitters, strychnine, and douches, or ozone, arsenic, caffeine at the same time improve the nervous system, general nutrition, and hæmatosis. The drugs which diminish the activity of this process are many. The antipyretics, as kairin, antipyrin, exalgin, acetanilid, and paraldehyde. Amyl and sodium nitrite act by destruction of a certain number of red blood-globules or by action on the heat centres. Chloroform used as an anæsthetic is the type of a drug which acts upon the nervous system, producing in the general nutrition a diminution of these changes. Drugs which sometimes increase and at others diminish this activity, according to the pathological condition of the individual, are many; they may be considered as regulators of the activity of these changes. As a type may be cited the alkaline iodides, and it is in emphysema, in disturbances of the pulmonary circulation, and in cyanosis, that these drugs act most efficiently, whether upon the quantity of oxyhæmoglobin or upon the activity of these changes.—*La Presse Médicale*, 1895, No. 43, p. 337.

DIPHTHERIA ANTITOXIN.

DR. SIDNEY MARTIN believes that the experiments which he has carried out tend to show that the antitoxic serum is capable of counteracting the poisons which are found in the tissues of patients dead of diphtheria. It has only a slight effect on the febrile rise of temperature produced by the albumins, but it completely counteracts the fatty degeneration of the heart produced by these substances, and to a great extent also the nerve degeneration.

DR. E. W. GOODALE, from an analysis of one hundred and five cases, concludes that it does not lessen the incidence of albuminuria; nor will it, if employed too late, prevent anuria. It does not prevent the occurrence of paralysis; in fact, in this series of cases 2.4 per cent. more occurred in those treated by it than in those treated in other ways.

DR. ALEX. JOHNSTON found that no benefit was to be obtained by using antitoxin in cases *in extremis*, and that nothing was gained from its use in very mild cases. His practice became one of selecting cases only moderately severe and well marked for the special treatment.

MR. LENNOX BROWNE pointed out the fallacies in the conclusions of those who preceded him at the London meeting of the British Medical Association. He concluded by saying that it was abundantly evident that with suitable precautions the results in England at any rate, under serum treatment and under former methods at command, did not at present justify the claims of antitoxin to so high a therapeutical eminence as at foreign centres of observation.—*British Medical Journal*, 1895, No. 1808, p. 461.

MEDICINE.

UNDER THE CHARGE OF

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GASTROLITH.

MANASSE (*Berlin. klin. Woch.*, 1895, No. 33) reports the following: A man of forty-four years, a hard drinker, was treated for gastric symptoms ascribed to alcoholism. Eight months later he was again admitted to the hospital, with tuberculosis of the lungs and peritoneum, from which he died. The stomach was adherent to the liver, the adhesion being over an ulcer in the pyloric region, which had advanced almost to perforation. The ulcer had the appearance of a simple chronic ulcer of the stomach. It was evidently caused by a concretion of flattened cylindrical shape, 10 cm. long, 5 cm. wide, and 4 cm. thick. The concretion was very light, weighing only seventy-five grammes. It had a resinous appearance, dark-green color, and laminated structure. Chemical tests showed it to be resinous. The conclusion of the reporter, who ascribed the origin of the calculus to the drinking of furniture-polish containing shellac, was confirmed by the employer of the patient, who stated that the man had long been addicted to the habit, against which he had frequently been warned. The case is similar to one reported by Friedländer, in which there were multiple calculi; perhaps also to one observed by Langenbuch and quoted by Friedländer (*Berliner klin. Wochenschrift*, 1881, No. 1).